DOCUMENT RESUME

ED 354 937 JC 930 106

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TITLE	Evergreen Valley College Matriculation Aide Intervention Evaluation: Success Rates of Fall 1992 Sections Using a Matriculation Aide Compared to Non-Intervention Sections for the Same Semester and Two Previous Semesters, English 321, 322, 330, and Math 12. Research Report #408.
INSTITUTION	San Jose/Evergreen Community Coll. District, San Jose, CA.
PUB DATE	2 Feb 93
NOTE	14p.
PUB TYPE	Statistical Data (110)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; College English; College Mathematics; Community Colleges; Comparative Analysis; Grades (Scholastic); *Outcomes of Education; *Performance; Program Evaluation; *Teaching Assistants; Teaching Methods; *Tutorial Programs; *Tutoring; Two Year Colleges; Two Year College Students
IDENTIFIERS	Evergreen Valley College CA; *Matriculation Aides

ABSTRACT

In fall 1992, a study was performed at Evergreen Valley College, in San Jose, California, to determine whether the presence of full-time instructional aides and part-time matriculation aides in four specific courses (English 321, 322, 330, and Math 12) led to increases in student success. Success was defined as receipt of a grade of "A," "B," or "C," or credit, and data were gathered by comparing outcomes of students in course sections with aides to those without aides. Results of the study include the following: (1) in 82% of the comparisons, the sections with aides had higher success rates than those without; (2) very high success rates in sections of English 321 using a full-time instructional aide suggests that instructional aides may be more effective than matriculation aides for English 321 students; (3) while the success rate of non-intervention English 322 students groups was 50%, 56% and 65%, students in the intervention section had a success rate of 83%; (4) although the presence of an aide raised the English 330 success rate in one instructor's class from 37% the previous semester to 59%, this was lower than the overall success rate of the other English 330 sections (64%); (5) although not faring as well as the non-intervention sections, the intervention section of English 330 (59% success rate) outperformed the non-intervention sections of spring 1992 (49%) and fall 1991 (55%); (6) the combined success rate of 48% for the three Math 12 (algebra) sections was higher than the 39% success rate for the three non-intervention sections; and (7) a comparison with sections from spring 1992 and fall 1991 indicates that the presence of a matriculation aide may have a positive impact on success rates. Extensive graphs are included. (MAB)

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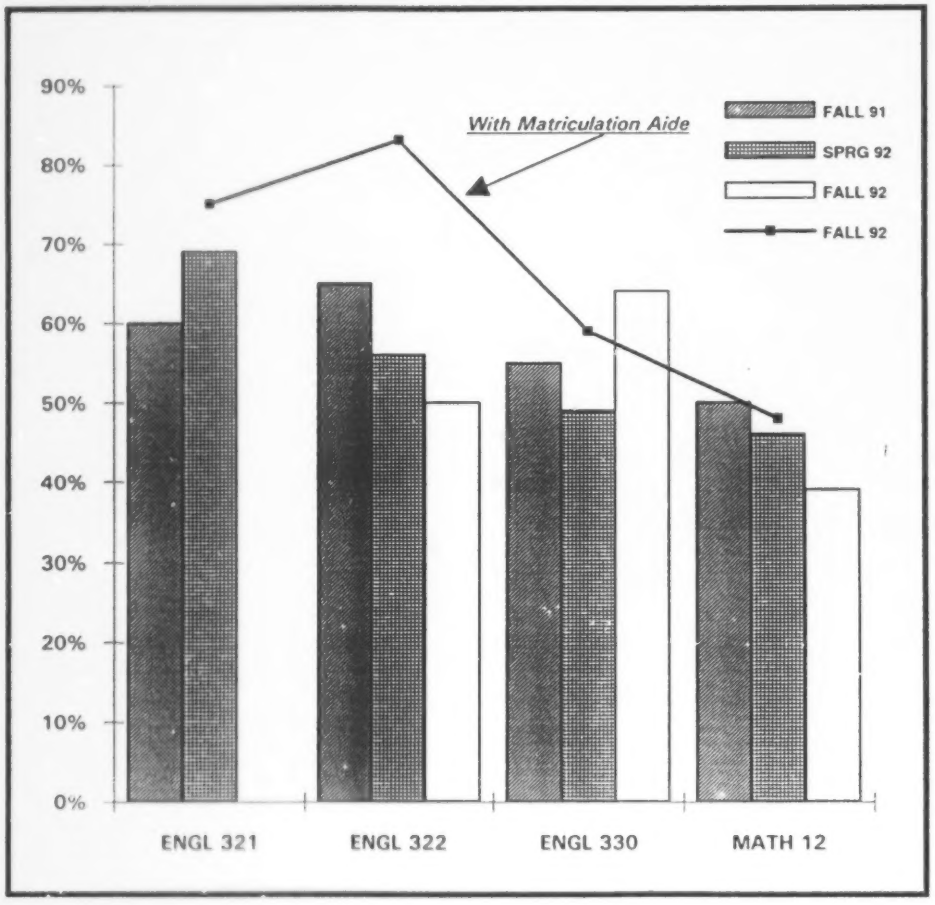
Evergreen Valley College Matriculaltion Aide Intervention Evaluation

SUCCESS RATES OF FALL 1992 SECTIONS USING A MATRICULATION AIDE

COMPARED TO NON-INTERVENTION SECTIONS FOR THE SAME SEMESTER AND TWO PREVIOUS SEMESTERS

English 321, 322, 330, and Math 12



In 9 of 11 comparisons (82%), the intervention sections had higher success rates than the non-intervention sections.

Research Report #408
SJ/ECCD Academic Standards

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BACKGROUND
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Definitions

Success (Suc) = A + B + C + CR grades

Source Documents

SJ/ECCD Ethnic Grade Distribution Reports
Fall 1991 through Fall 1992

Fall 1992 Matriculation Program Reports from:
Nancy Wambach, Michele LeBleu-Burns, and Donna Gilmour

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Data Analysis and Document Preparation

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Evergreen Valley College
Matriculation Aide Intervention Evaluation

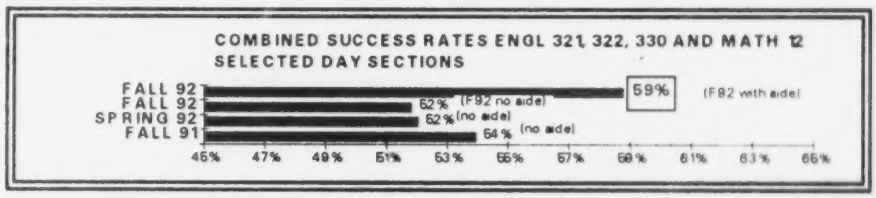
by Jon Kangas
2/28/93

History

The use of matriculation aides in English 321, 322, and 330 as well as in Math 12 in the Fall 1992 semester at Evergreen Valley College was undertaken as part of the college Retention Program. An aide was also used in an AFFIRM section of English 330 and in an AFFIRM section of English 104, but those are not dealt with in this report because with more than one intervention strategy working in these two sections (AFFIRM and matriculation aide), the comparisons to matriculation aide-only groups would be inappropriate. The purpose of the study is to discover if the presence of an aide increases student success.

The Program

The English Matriculation Aide:	*The English Matriculation Aide and Her Supervisor:*
completed 191 contact hours in the classroom	conferred on methods for setting up study groups
referred students to various departments on campus (Financial Aid, Student Health Services, Student Accounts, etc.)	discovered methods for encouraging students to take advantage of the services of the Writing Center
worked with students on an individual and group basis, holding 52 individual study group sessions	developed methods for enlisting instructor cooperation
served as Writing Center liaison	developed methods for dealing with student tardiness and absenteeism
presented information about time management and study skills	formulated helpful questionnaires and Student Survey forms
met weekly with teachers to discuss problems and concerns as they arose	developed methods for supporting students both in and out of class
conducted five different student surveys	
made 152 outside-of-class contacts both in person and by telephone, following up on student absences and individual problems	
The Math Matriculation Aide:	***The Program Provided Students with:***
attended class sessions, made announcements, and disbursed information to students	Beginning Algebra software program in computer lab with tutor and aide available
assisted students in the computer lab	small group study sessions with a tutor
maintained records of student participation	drop-in tutoring
lead study sessions	a math hot line



Conclusion

The use of a matriculation aide in English 321, 322, 330, and Math 12 may be an effective intervention strategy for increasing student success. The overall success rate with a matriculation aide in the classroom was higher than success rates without an aide in comparisons both with same-semester courses and with those of the two previous semesters. Very high success rates in sections of English 321 using a full-time instructional aide suggest that that may be a more effective strategy than the use of a matriculation aide for English 321 students. Further research and an additional semester of data are needed to evaluate the program's effectiveness more conclusively.

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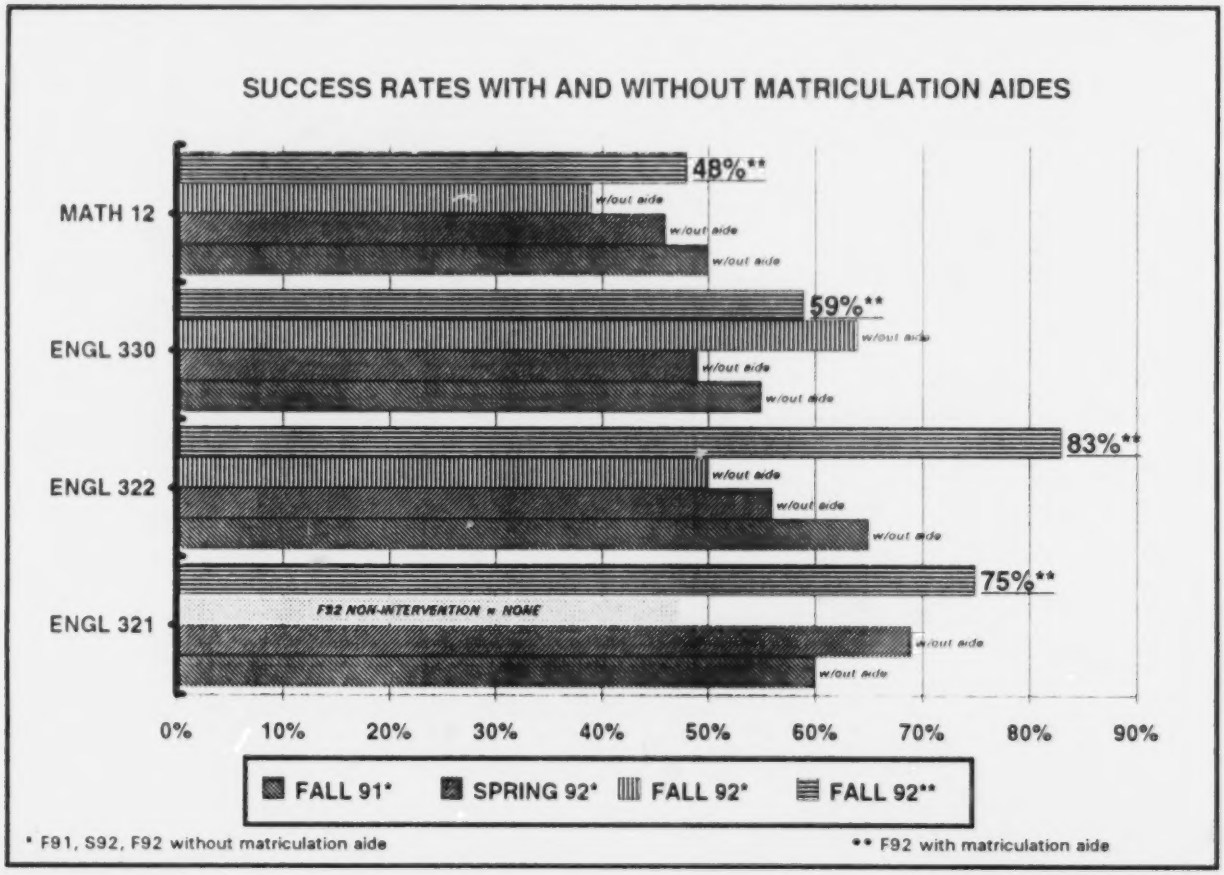
Evergreen Valley College Matriculation Aide Intervention Evaluation

SUCCESS RATES OF FALL 1992 SECTIONS USING MATRICULATION AIDE COMPARED TO NON-INTERVENTION SECTIONS FOR THE SAME SEMESTER AND TWO PREVIOUS SEMESTERS

English 321, 322, 330, and Math 12

Question: For Fall 1992, what percent of the time did the success rate of English and math sections using matriculation aides exceed that of F91, S92, and F92 comparison sections?

COURSE	No Aide FALL 91			No Aide SPRING 92			No Aide FALL 92			Matriculation Aide FALL 92		
	Tot #	#Suc	%Suc	Tot #	#Suc	%Suc	Tot #	#Suc	%Suc	Tot #	#Suc	%Suc
ENGL 321	50	30	60%	89	61	69%	n/a	n/a	n/a	40	30	75%
ENGL 322	106	69	65%	124	69	56%	74	37	50%	29	24	83%
ENGL 330	154	85	55%	144	70	49%	136	87	64%	34	20	59%
MATH 12	411	205	50%	225	103	46%	116	45	39%	130	63	48%



Comment: In 9 of 11 comparisons (82%), the intervention sections had higher success rates than the non-intervention sections. The use of a matriculation aide appears to relate to greater success. There is some indication that instructor variables may impact the results.

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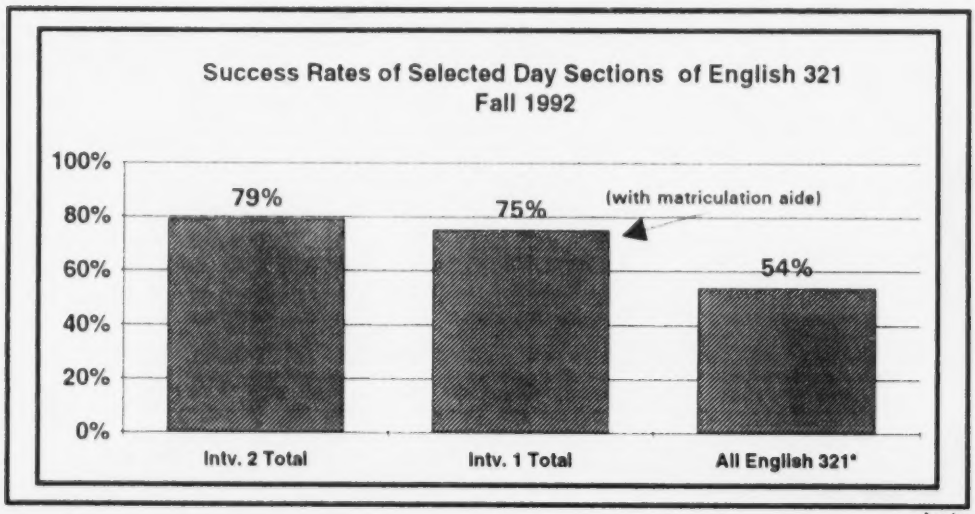
Evergreen Valley College Matriculation Aide Intervention Evaluation

Matriculation Intervention Section Compared to Two Different Intervention Sections English 321 Fall 1992

Question: What was the success rate for the Fall 1992 intervention section of English 321 compared to two intervention sections of a different type and compared to all F92 English 321 sections minus the intervention sections?

English 321	*TOTAL #*	*#SUC*	*%SUC*
Intv. 1	40	30	75%
Intv. 1 Total	40	30	75%
Intv. 2	32	29	91%
Intv. 2	30	20	67%
Intv. 2 Total	62	49	79%
All English 321*	176	95	54%

Key: Intv. 1= Intervention section using matriculation aide for F92
Intv. 2= Intervention sections using full-time instructional aide for F92
All Englisn 321* = All sections of English 321 for F92 minus three intervention sections (Includes evening, mini-semester, IBM, and Re-entry sections)



Academic Standards

Comment: The intervention in two sections of English 321 consisted of full-time instructional aides in the classroom. They used intervention strategies different from those of the matriculation aide section and achieved success rates of 91% and 67%. A third section with a full-time instructional aide, a Re-entry class, had an 85% success rate. The fact that the matriculation aide did not spend large amounts of time in the class and the fact that the particular section was also filled with several students from the Disabled Student Program probably reduced the success rate somewhat. All in all, it appears that the instructional aide in the modularized English 321 classes may be the more effective form of intervention. The kinds of interventions that the matriculation aide can provide may better serve the next higher level of reading and writing (322 and 330). Further research will be needed to verify this hypothesis.

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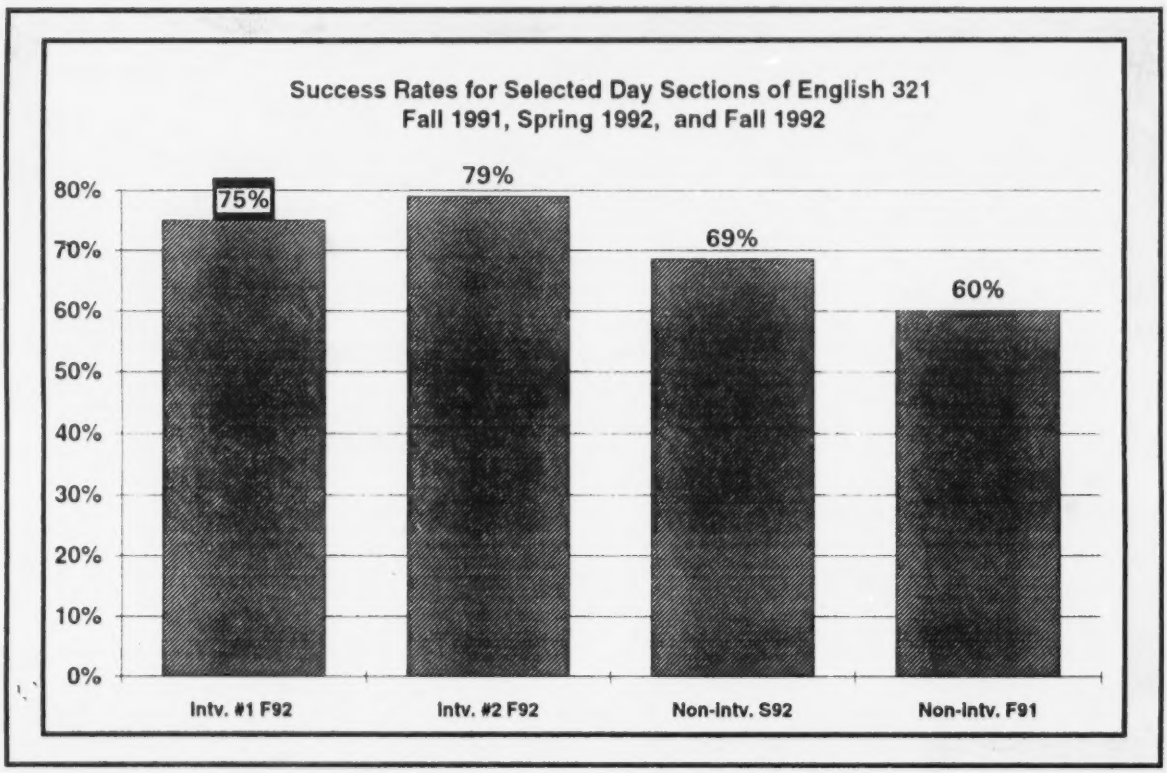
Evergreen Valley College Matriculation Aide Intervention Evaluation

Fall 1992 Matriculation Aide Section Compared to F92 Instructional Aide Sections and to Equivalent S92 and F91 Non-intervention Sections English 321

Question: How did the use of a matriculation aide as an intervention strategy in English 321 relate to success in the Fall 1992 intervention section compared to success in all comparable non-intervention day sections of English 321 for S92 and F91 and to two F92 sections using instructional aides?

English 321	TOTAL #	#SUC	%SUC
Intv. #1 F92	40	30	75%
Intv. #2 F92	62	49	79%
Non-Intv. S92	89	61	69%
Non-Intv. F91	50	30	60%



Academic Standards

Comment: The F92 section of English 321 with a matriculation aide had a 75% success rate. The other two day sections for the same semester used a different type of intervention, full-time instructional aides, and had success rates of 91% and 67%. For comparable S92 sections, the success rate was 69%; it was 60% for F91. The 75% rate with the matriculation aide is quite encouraging. Previous indications were that this form of intervention was not clearly helpful at this level; it still may prove to be less effective than other interventions. Instructor variables also may be operating. An additional semester of data would be useful.

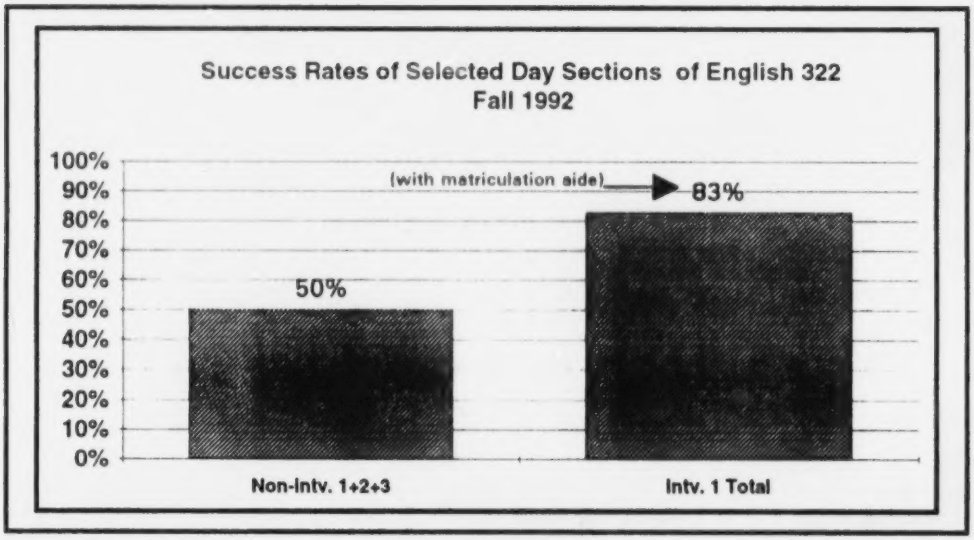
Evergreen Valley College Matriculation Aide Intervention Evaluation

Intervention Sections Compared to Equivalent Day Non-intervention Sections
English 322
Fall 1992

Question: What was the success rate for the Fall 1992 intervention section of English 322 compared to three non-intervention sections for F92 and compared to all F92 English 322 sections minus the intervention section?

English 322	*TOTAL #*	*#SUC*	*%SUC*
Intv. 1	29	24	**83%**
Intv. 1 Total	29	24	**83%**
Non-intv. 1	27	14	**52%**
Non-intv. 2	25	12	**48%**
Non-intv. 3	22	11	**50%**
Non-intv. 1+2+3	74	37	**50%**
All English 322*	196	113	**58%**

Key: Intv. 1= Intervention section using matriculation aide for F92
Non-intv. 1+2+3 =Non-intervention day sections 1, 2 and 3 for F92
All English 322* = All sections of English 322 for F92 minus intervention section1
(Includes evening, mini-semester, and Re-entry sections)



Academic Standards

Comment: The success rate for the intervention section of English 322 in F92 was a remarkable 83%. The highest rate of the three comparison sections was 52%, and the rate for all English 322 minus the intervention section was 58%. Another semester of data may help clarify whether the dramatically higher success rate of this semester was due to the influence of the matriculation aide, instructor variability, or some other factor.

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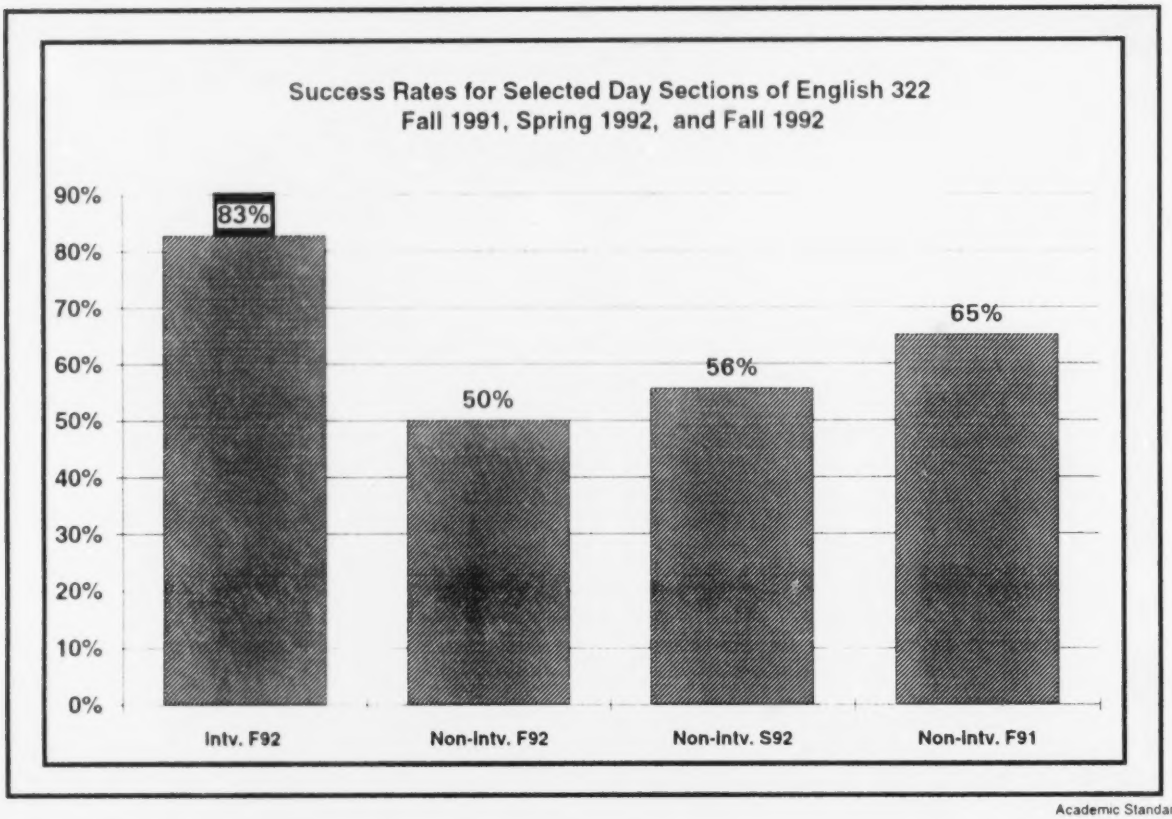
Evergreen Valley College Matriculation Aide Intervention Evaluation

Fall 1992 Intervention Section
Compared to Equivalent F92, S92, and F91 Non-intervention Sections
English 322

Question: How does the use of a matriculation aide as an intervention strategy in English 322 relate to success in the Fall 1992 intervention section compared to success in all comparable non-intervention day sections of English 322 for F92, S92, and F91?

English 322	*TOTAL #*	*#SUC*	*%SUC*
Intv. F92	29	24	**83%**
Non-intv. F92	74	37	**50%**
Non-intv. S92	124	69	**56%**
Non-intv. F91	106	69	**65%**



Academic Standards

Comment: Compared to English 322 non-intervention sections for F92, Sp 92, and F91, the English 322 section using a matriculation aide had a remarkable 83% success rate compared to 50%, 56%, and 65%, respectively, for the non-intervention groups.

Evergreen Valley College Matriculation Aide Intervention Evaluation

Intervention Sections Compared to Equivalent Day Non-intervention Sections

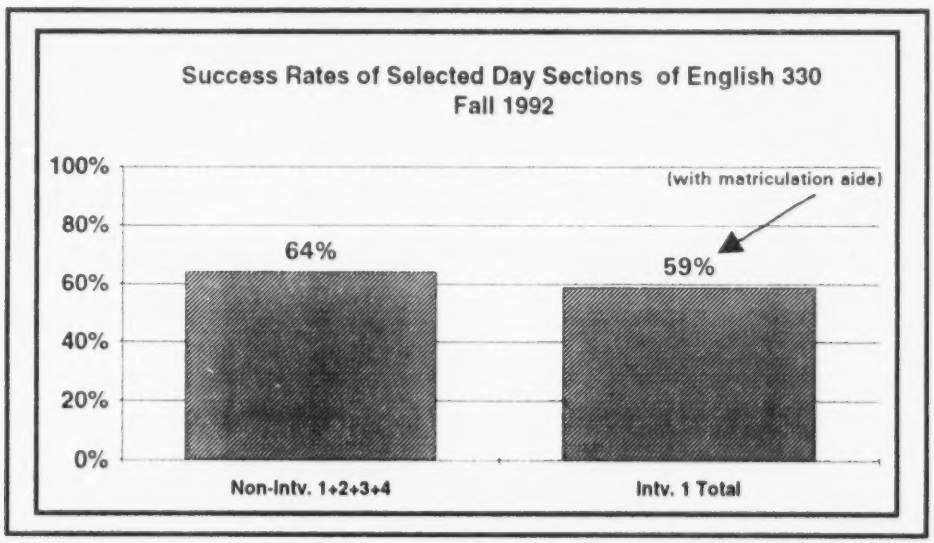
English 330

Fall 1992

Question: What was the success rate for the Fall 1992 intervention section of English 330 compared to four non-intervention sections for F92 and compared to all F92 English 330 sections minus the intervention section?

English 330	*TOTAL #*	*#SUC*	*%SUC*
Intv. 1	34	20	**59%**
Intv. 1 Total	34	20	**59%**
Non-intv. 1	37	20	**54%**
Non-intv. 2	24	19	**79%**
Non-intv. 3	32	22	**69%**
Non-intv. 4	43	26	**60%**
Non-intv. 1+2+3+4	136	87	**64%**
All English 330*	278	177	**64%**

Key: Intv. 1= Intervention section using matriculation aide for F92
Non-intv. 1+2+3+4 =Non-intervention day sections 1, 2, 3, and 4 for F92
All English 330* = All sections of English 330 for F92 minus intervention section1
(Includes evening, mini-semester, AFFIRM, Enlace, and Re-entry sections)



Academic Standards

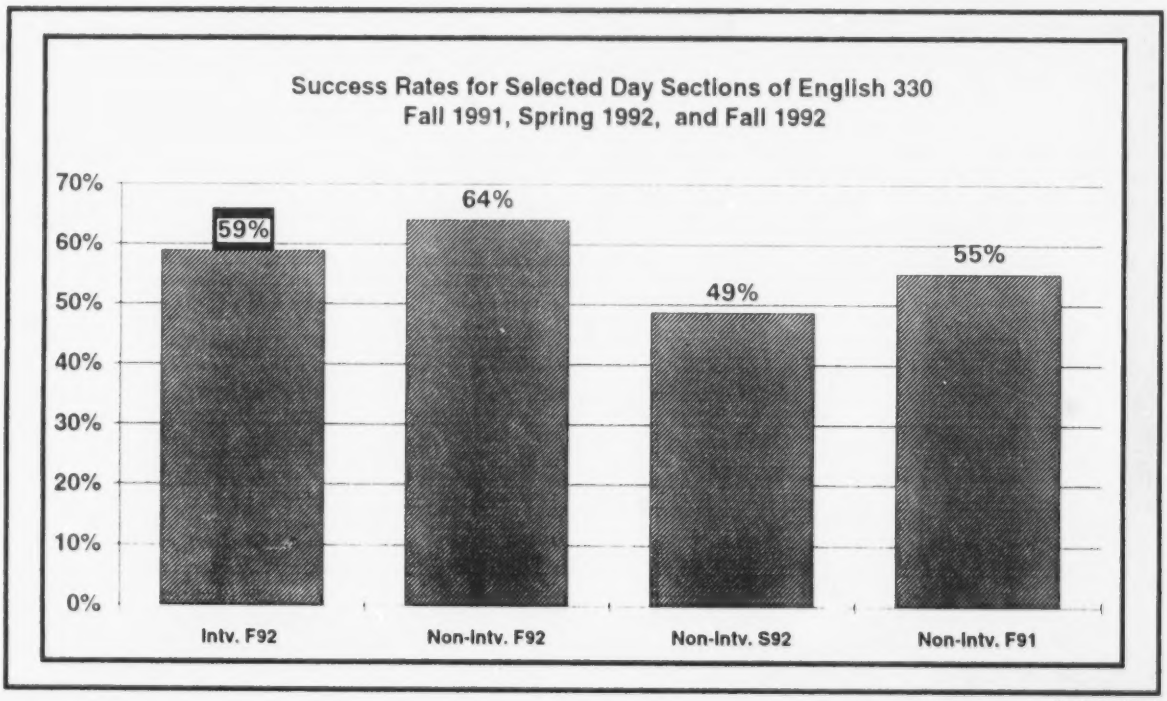
Comment: The Intv. 1 instructor using a program aide in F92 had a higher success rate at 59% than the same instructor had for the previous semester without an aide at 37%. However, the 59% rate was higher than only one of the four comparison sections for F92, and lower than the rate for all English 330 minus the intervention section at 64%. The results look promising in that the instructor had a higher success rate when using an aide, but the fact that most English 330 comparison sections had higher success rates obscures the results. Further use of intervention is certainly warranted, along with continued research to monitor the program's effectiveness.

Evergreen Valley College Matriculation Aide Intervention Evaluation

Fall 1992 Intervention Section
Compared to Equivalent F92, S92, and F91 Non-intervention Sections
English 330

Question: How does the use of a matriculation aide as an intervention strategy in English 330 relate to success in the Fall 1992 intervention section compared to success in all comparable non-intervention day sections of English 330 for F92, S92, and F91?

English 330	*TOTAL #*	*#SUC*	*%SUC*
Intv. F92	34	20	**59%**
Non-intv. F92	136	87	**64%**
Non-intv. S92	144	70	**49%**
Non-intv. F91	154	85	**55%**



Academic Standards

Comment: The 59% success rate of the F92 section of English 330 using a matricualtion aide was higher than the comparable non-intervention day sections of English 330 for both S92 and F91 at 49% and 55%, respectively. The comparable non-intervention group for F92, however, was higher with a 64% success rate. The results are encouraging overall, and further data from the current semester should be helpful in evaluating the merits of this intervention program.

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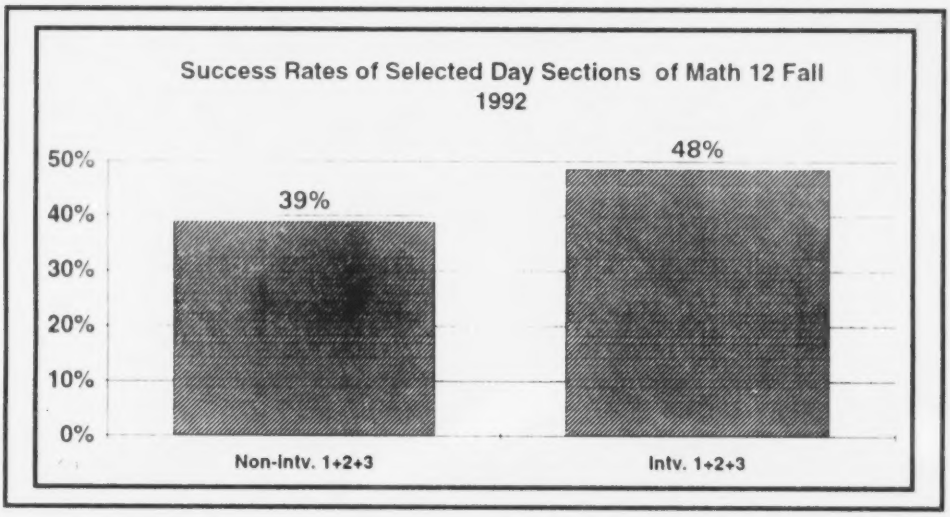
Evergreen Valley College Matriculation Aide Intervention Evaluation
Intervention Sections Compared to Three Comparable Day Sections and to All Other Sections of Algebra I (Math 12)
Fall 1992

Question: What were the success rates for three intervention sections of Math 12 (Algebra I) compared to three non-intervention sections for Fall 1992 and compared to all Math 12 minus the intervention sections?

Math 12	*TOTAL #*	*#SUC*	*%SUC*
Intv. 1	52	30	**58%**
Intv. 2	35	17	**49%**
Intv. 3	43	16	**37%**
Intv. 1+2+3	130	63	**48%**
Non-intv. 1	38	11	**29%**
Non-intv. 2	42	20	**48%**
Non-intv. 3	36	14	**39%**
Non-intv. 1+2+3	116	45	**39%**
All Math 12*	374	194	**52%**

Key: Intv. 1+2+3 = Intervention section 1,2, and 3 for F92
Non-intv. 1+2+3 = Intervention section 1,2, and 3 for F92
All Math 12* = All sections of Math 12 for F92 minus intervention sections 1+2+3
(Includes evening, mini-semester, IBM, AFFIRM, and Enlace sections)



Academic Standards

Comment: The combined success rate of 48% for three Math 12 intervention sections was higher than the 39% success rate for three comparison non-intervention day sections. The success rate for all fourteen sections of Math 12 minus the three intervention sections was 52%, four percentage points higher than the intervention group. However, because these eleven sections included evening, mini-semester, IBM, and other intervention program sections (AFFIRM and Enlace), the "All Math 12" comparison is not particularly significant.

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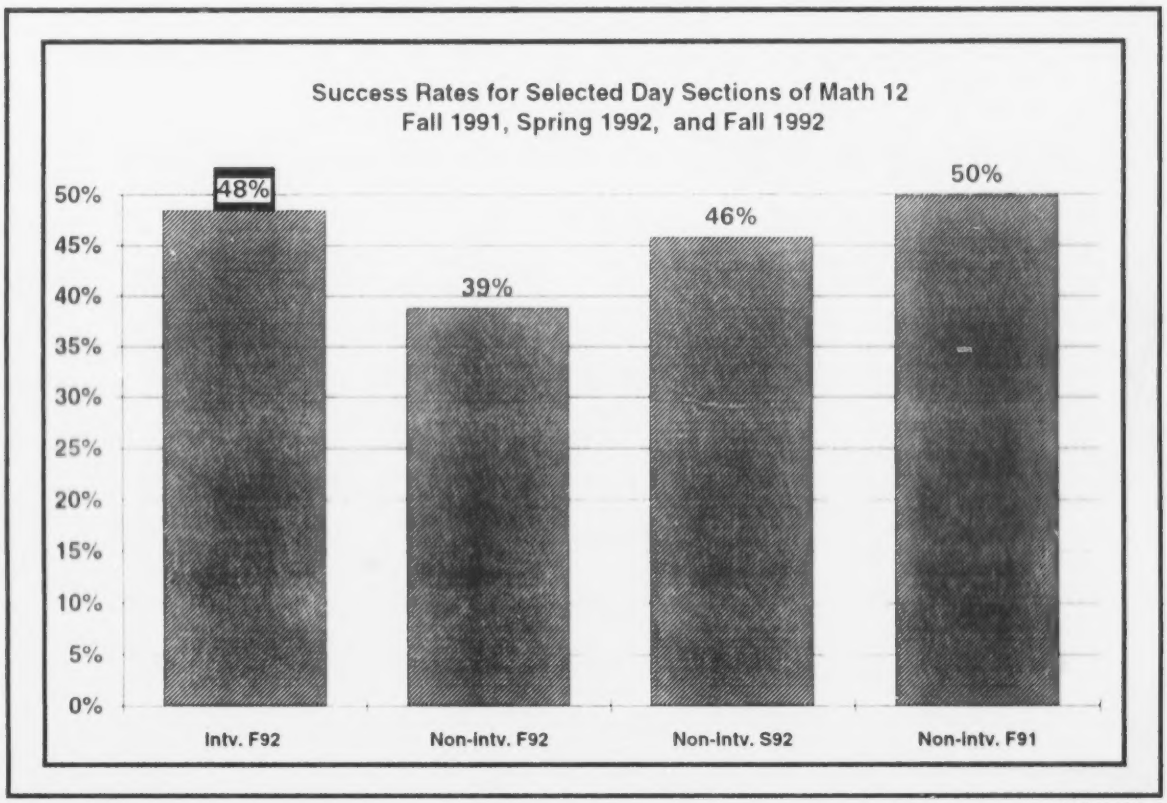
Evergreen Valley College Matriculation Aide Intervention Evaluation

Fall 1992 Intervention Section
Compared to Equivalent F92, S92, and F91 Non-intervention Sections
Algebra I (Math 12)

Question: How does the use of a matriculation aide as an intervention strategy in Math 12 relate to success in the Fall 1992 intervention section compared to success in all comparable non-intervention day sections of Math 12 for F92, S92, and F91?

Math 12	*TOTAL #*	*#SUC*	*%SUC*
Intv. F92	130	63	**48%**
Non-intv. F92	116	45	**39%**
Non-intv. S92	225	103	**46%**
Non-intv. F91	411	205	**50%**



Academic Standards

Comment: The F92 section of Math 12 with a matriculation aide had a 48% success rate compared to 39% for non-intervention sections the same semester, 46% for comparable S92 sections, and 50% for F91. This is quite encouraging and indicates that the presence of an aide at this level may have a positive impact on the success rates of Math 12 students.

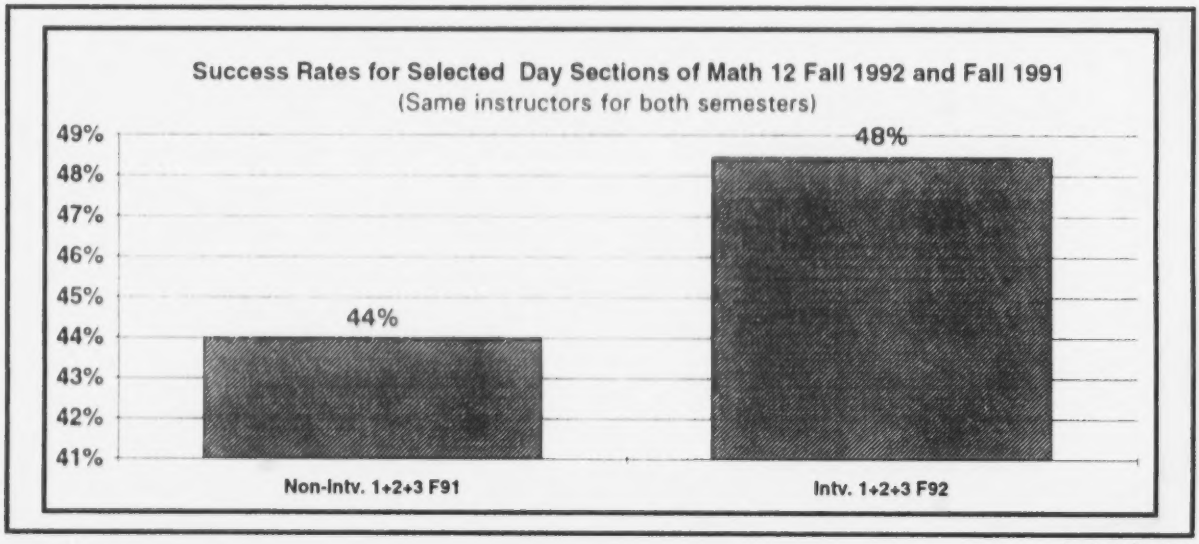
Evergreen Valley College Matriculation Aide Intervention Evaluation

Fall 1992 Intervention Sections Compared to Fall 1991 Non-intervention Sections
Day classes taught by the same instructors both semesters
Algebra I (Math12)

Question: What were the success rates for three day intervention sections of Math 12 (Algebra I) in Fall 1992 compared to three day non-intervention sections taught by the same instructors in Fall 1991?

Math 12	*TOTAL #*	*#SUC*	*%SUC*
Instructor #1 w/aide F92	52	30	**58%**
Instructor #2 w/aide F92	35	17	**49%**
Instructor #3 w/aide F92	43	16	**37%**
Intv. 1+2+3 F92	130	63	**48%**
Instructor #1 no aide F91	44	23	**52%**
Instructor #2 no aide F91	38	14	**37%**
Instructor #3 no aide F91	34	14	**41%**
Non-Intv. 1+2+3 F91	116	51	**44%**

Key: Intv.1+2+3 F92 = Intervention sections 1, 2, and 3 for F92
Non-intv.1+2+3 F91 = Non-intervention sections 1, 2, and 3 for F91 (same instructors as F92 sections)



Academic Standards

Comment: Compared with their similar classes the previous fall semester, two of the three instructors achieved higher success rates with the addition of a matriculation aide in F92. The combined 48% success rate of the F92 sections with aides was four percentage points higher than the comparable F91 group without aides at 44%. The addition of an aide in the F92 sections seems to have affected student success in a positive way. However, the difference is small enough that the program's effectiveness should continue to be monitored by research.

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